

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for reducing the amount of sulfur-containing impurities in carbonaceous materials, comprising:

(a) contacting ~~said~~ the materials with an aqueous solution of hydrofluorosilicic acid in the absence of hydrogen fluoride under conditions wherein at least some of ~~said~~ the sulfur-containing impurities react with ~~said~~ the hydrofluorosilicic acid to form reaction products, and

(b) separating ~~said~~ the reaction products from ~~said~~ the carbonaceous materials.

2. (Withdrawn) A process for reducing the amount of sulfur-containing impurities in carbonaceous materials, comprising (a) contacting said materials with an aqueous solution of hydrofluorosilicic acid in the absence of hydrogen fluoride under conditions wherein at least some of said sulfur-containing impurities react with said hydrofluorosilicic acid to form reaction products; (b) separating said reaction products and said hydrofluorosilicic acid from said carbonaceous materials and subsequently (c) treating said carbonaceous materials with a fluorine acid solution which comprises an aqueous solution of hydrofluorosilicic acid and hydrogen fluoride.

3. (Withdrawn) A process for reducing the amount of sulfur-containing impurities in carbonaceous materials, comprising: treating said carbonaceous materials with a fluorine

acid solution which comprises an aqueous solution of hydrofluorosilicic acid and hydrogen fluoride, separating said carbonaceous materials from said aqueous solution of hydrofluorosilicic acid and hydrogen fluoride, and then contacting said carbonaceous materials with an organic solvent capable of dissolving elemental sulfur.

4. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein the concentration of hydrofluorosilicic acid in the step (a) is in the range of 27% to 37% (w/v or w/w or v/w).

5. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein the concentration of hydrofluorosilicic acid in the step (a) is in the range of 28% to 36% (w/v or w/w or v/w).

6. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein the temperature of step (a) is in the range of 28 to 75°C.

7. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein the temperature of step (a) is in the range of 30 to 70 °C.

8. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein the reaction time of step (a) is in the range of 8 to 120 minutes.

9. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein the reaction time of step (a) is in the range of 10 to 100 minutes.

10. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein in step (a) the carbonaceous materials are mixed with at least about twice their weight of the aqueous hydrofluorosilicic acid.

11. (Currently Amended) The process of claim 1, ~~or~~ 2 wherein after step (b) treating ~~said~~ the separated carbonaceous materials with further aqueous hydrofluorosilicic acid to remove residual metal fluorosilicates.

12. (Withdrawn) The process of claim 2 or 3 wherein the fluorine acid solution has a composition lying between the following compositions: 4% w/w H₂SiF₆, 92% w/w H₂O, 4% w/w HF and 35% w/w H₂SiF₆, 30% w/w H₂O, 35% HF.

13. (Withdrawn) The process of claim 2 or 3 wherein the fluorine acid solution has a composition lying between the following compositions: 5% w/w H₂SiF₆, 90% w/w H₂O, 5% w/w HF and 34% w/w H₂SiF₆, 32% w/w H₂O, 34% HF.

14. (Withdrawn) The process of claim 2 or 3 wherein the fluorine acid solution has a composition of about 25% w/w H₂SiF₆, 50% w/w H₂O, 25% w/w HF.

15. (Withdrawn) The process of claim 2 wherein in step (c) the carbonaceous materials are treated with at least about twice their weight of the fluorine acid solution.

16. (Withdrawn) The process of claim 3 wherein in step (a) the carbonaceous materials are treated with at least about twice their weight of the fluorine acid solution.

17. (Currently Amended) The process of claim 1, ~~wherein~~ comprising after step (b): ~~comprising~~ washing ~~said~~ the separated carbonaceous material with aqueous H₂SiF₆, and heating ~~said~~ washed carbonaceous material at a temperature in the range of about 250°C to about 400°C to evaporate any residual hydrofluorosilicic acid remaining on the carbonaceous material.

18. (Withdrawn) The process of claim 3 wherein the organic solvent capable of dissolving elemental sulfur is ethanol, benzene, carbon disulfide, either or carbon tetrachloride, or a mixture of two or more of these.

19. (Withdrawn) The process of claim 3 wherein the step of contacting the carbonaceous materials with the organic solvent is at ambient temperature and atmospheric pressure.